

# RESIDENTIAL POOL COVER SHEET



## ITEMS NECESSARY FOR SUBMITTAL:

- **FOUR (4) PLOT PLANS** - Plot plans should clearly show pool equipment, distance from property lines, structures, etc. Also, **easements** for utilities such as phone lines, power lines and any other public utilities should be shown on this plan. Plot plan must also show location and type of barrier or fence used for pool protection **OR** clearly show which doors will receive alarms and/or self-closing mechanisms for pool protection.
- **TWO (2) COMPLETE SETS OF STRUCTURAL PLANS & ENGINEERING** - These plans show all structural elements of the pools construction including rebar placement and size, gunite thickness, piping placement, etc. Both the plans and the Engineer's calculations must be "**wet signed**" and stamped by the Engineer.

## INSPECTION SEQUENCE:

- **Pre-Gunite:** During this inspection, City staff will verify that steel placement is in accordance with the approved plans, rough electrical including trenches and bonding, rough plumbing including trenches, pressure test and gas lines.
- **Pre-Deck:** During this inspection, City staff will verify that the area surrounding the pool is complete and ready to accept the application of the pool deck.
- **Pre-Plaster/Final:** Prior to releasing the pool for plastering City staff will verify all elements of construction and life safety are in place and functional. **NOTE: After completion of this inspection City staff will NOT visit the site again. At this point the pool will be deemed finished and complete. It will be the responsibility of the pool contractor to furnish the pool owner with a pre-cut non-permeable floating pool cover in compliance with City of Tracy Local Ordinance.**

**NOTE:** Prefabricated fiberglass in-ground pools must have barriers and alarms installed and operational and inspected for approval immediately after excavation and prior to installation of pool.

Additionally, prefabricated swimming pools in which the pool walls are entirely above adjacent grade and does not exceed 5,000 gallons and is less than 24" in depth are exempt from permit. However, they must have barriers and alarms installed and operational prior to filling pool with any water.

## MANDATORY REQUIREMENTS FOR POOL AND SPA HEATING SYSTEMS AND EQUIPMENT FOR ALL OCCUPANCIES IN ACCORDANCE WITH 2016 CA ENERGY STANDARDS SECTION 110.4

- A) Certification by Manufacturers** - Any pool or spa heating system or equipment may be installed only if the manufacturer has certified that the system or equipment has all of the following:
- **Efficiency.** A thermal efficiency that complies with the Appliance Efficiency Regulations; and
  - **On-off switch.** A readily accessible on-off switch, mounted on the outside of the heater that allows shutting off the heater without adjusting the thermostat setting; and
  - **Instructions.** A permanent, easily readable, and weatherproof plate or card that gives instruction for the energy efficient operation of the pool or spa and for the proper care of pool or spa water when a cover is used; and
  - **Electric resistance heating.** No electric resistance heating; and
    - **EXCEPTION 1 to Section 110.4 (a) 4:** Listed package units with fully insulated enclosures, and with tight-fitting covers that are insulated to at least R-6.
    - **EXCEPTION 2 to Section 110.4 (a) 4:** Pools or spas deriving at least 60 percent of the annual heating energy from site solar energy or recovered energy.
- B) Installation.** Any pool or spa heating system or equipment shall be installed with all of the following:
- **Piping.** At least 36 inches of pipe shall be installed between the filter and the heater or dedicated suction and return lines, or built-up connections shall be installed to allow for future additional of solar heating equipment; and
  - **Covers.** A cover for outdoor pools or outdoor spas; that have a heat pump or gas heater.
  - **Directional inlets and time switches for pools.** If the system or equipment is for a pool:
    - The pool shall have directional inlets that adequately mix the pool water and;
    - A time switch or similar control mechanism shall be installed as part of pool water circulation control system that will allow all pumps to be set or programmed to run only during off-peak electric demand period and for the minimum time necessary to maintain the water condition required by applicable public health standards.

## SECTION 110.5 - NATURAL GAS CENTRAL FURNACES, COOKING EQUIPMENT, & POOL AND SPA HEATERS: PILOT LIGHTS PROHIBITED

Any natural gas system or equipment listed below may be installed only if it does not have a continuously burning pilot light:

- **Pool heaters.**
- **Spa heaters.**

PLEASE NOTE: CF-6R-Mech-03 form must be submitted to inspector at time of final inspection

- Pool heater vents should terminate at least four (4) feet from property line.

## SECTION 3109 (2016 CBC) POOL/SPA/HOT TUB ENCLOSURE AND SAFETY DEVICES

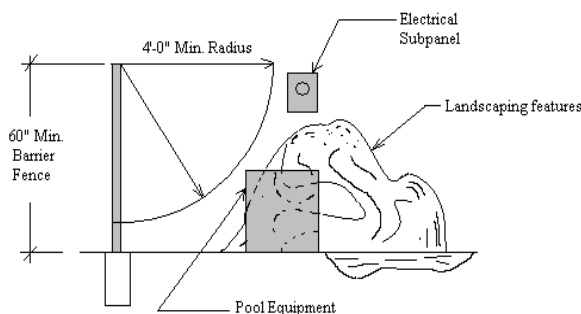
The following is an abbreviated guideline for the submittal and inspection process:

The construction or remodel of a swimming pool or spa at a single-family home shall be enclosed by a barrier having a minimum height of **60 inches** with a maximum vertical clearance from finished grade to bottom of barrier of **2 inches**. Pedestrian access gates shall open away from the pool and have a self-closing, self-latching device. Other gates shall have a self-latching device. All self-latching devices shall be located no lower than **54 INCHES** above the ground.

In addition, the pool or spa shall be equipped with at least **two** of the following seven drowning prevention safety features:

1. An enclosure that isolates the swimming pool or spa from the private single-family home meeting the following requirements:
  - Any access gates through the enclosure open away from the swimming pool and are self-closing with a self-latching device placed no lower than 60 inches above the ground.
  - A minimum height of 60 inches.
  - A maximum vertical clearance from the ground to the bottom of the enclosure of 2 inches.
  - Gaps or voids, if any, do not allow passage of a sphere equal to or greater than 4 inches in diameter.
  - An outside surface free of protrusions, cavities or other physical characteristics that would serve as handholds or footholds that could enable a child to climb over.
2. Removable mesh fencing that meets ASTM Specifications F2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
3. An approved safety pool cover that meets all of the performance standards of ASTM, in compliance with standard F1346-91. **Documentation shall be provided at the time of permit application.**
4. Exit alarms on the private single-family home's doors that provide direct access to the swimming pool or spa. The exit alarm may cause either an alarm noise or a verbal warning, such as repeating notification that "the door to the pool is open."
  - Alarms shall sound continuously for a minimum of **30 SECONDS** within **7 SECONDS** after an exterior door is opened, and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm may be equipped with a manual means to temporarily deactivate for a single opening. The deactivation period shall last no longer than **15 SECONDS**. The deactivation shall be located **AT LEAST 54 INCHES** above the threshold of the door.
5. A self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor on the private single-family home's doors providing direct access to the swimming pool or spa.
6. An alarm that, when placed in a swimming pool or spa, will sound upon detection of accidental or unauthorized entrance into the water. The alarm shall meet and be independently certified to the ASTM Standard F2208 "Standard Safety Specification for Residential Pool Alarms," which includes surface motion, pressure, sonar, laser and infrared type alarms. A swimming protection alarm feature designed for individual use, including an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water, is not a qualifying drowning prevention safety feature.
7. Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the features set forth above and has been independently verified by an approved testing laboratory as meeting standards for those features established by the ASTM or the ASME.

Field verify that no equipment, climbable landscaping feature, water slides, or other similar play equipment is within 4'0" radius of the pool barrier/enclosure tops. Barriers and enclosures shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers/enclosure **Per 2016 C.B.C. Section 3109.4.1 through 3109.4.3.**



## GLAZING REQUIREMENTS:

**Section 2406.4.5 (C.B.C. 2016 Edition)** requires safety glazing in windows and doors or walls and fences used as the barrier for indoor or outdoor swimming pools or spas when **BOTH** of the following conditions are present.

- 9.1 The bottom edge of the glazing is less than **60 INCHES** above the walking surface on the poolside of the glazing.
- 9.2 The glazing is within **5 FEET** of the swimming pool or spas water's edge.

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### **ANTI-ENTRAPMENT COVERS**

All swimming pools, spas and hot tubs will need to have anti-entrapment covers installed over any suction inlet/drain whenever new pools are installed or to existing pools that are modified. **(Per 2016 C.B.C. Section 3109.4.4.8)**

All swimming pools, spas and hot tubs shall have at least two circulation suction outlets per pump that shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, and that are separated by a distance of at least three (3) feet in any direction between suction outlets, or be designed to use alternatives to suction outlets including, but not limited to, skimmers or perimeter overflow systems to conduct water to the recirculation pump. Suction inlets that are less than 12 inches across shall be covered with anti-entrapment grates that cannot be removed.

### **EQUIPOTENTIAL BONDING**

Approved equipotential bonding grid **(per 2016 C.E.C. Article 680.26)** shall extend for 3 ft. horizontally beyond the inside walls of the pool and shall include unpaved surfaces as well as poured concrete and other types of paving.

- All metal within 5' of edge of water shall be bonded **(Per 2016 C.E.C. Section 680.26)**
- One GFCI receptacle must be located between 6'-20' of edge of water **(Per 2016 C.E.C. Section 680.22)**

### **ANTI-CLIMB FENCES:**

Fences with horizontal support members with a distance of less than 45" between the tops of the members shall be equipped with anti-climb protection. A nominal 2x4 may be cut at a 67° angle and attached to the mid span member will satisfy this requirement or other methods that have been approved by the Building Official. The anti-climb protection must be installed on the side of the fence that is opposite of the pool. The anti-climb protection must be identified with a permanent sign stating "Anti-Climb Device Do Not Remove"

